

IN THE CLAIMSRECEIVED  
CENTRAL FAX CENTER

DEC 15 2006

The following is a complete listing of the claims:

1. (Previously presented) An output adapter frame for a die sorter, comprising:  
at least one channel along the upper surface of the output adapter frame,  
wherein the channel holds a plurality of die carriers and has an open end and a closed end;  
  
a barrier located at the closed end of each channel; and  
  
a retention mechanism for each of the plurality of die carriers, wherein the retention mechanism is along a side of the channel and actively biases the die carrier against the opposing side of the channel.
2. (Canceled).
3. (Previously presented) The output adapter frame of Claim 1, wherein the output frame has the same physical exterior dimensions as a SEMI standard film frame design for an 8-inch or 12-inch wafer.
4. (Previously presented) The output adapter frame of Claim 1, wherein the die carriers are waffle packs or GEL-PAK die carriers.
5. (Previously presented) The output adapter frame of Claim 1, wherein the die carriers are approximately 2" by 2".

LAW OFFICES OF  
MACPHERSON KWOK CHEN  
& HEID LLP

2402 MICHELSON DRIVE  
SUITE 210  
IRVINE, CA 92612  
(949) 752-7040  
FAX (949) 752-7049

6. (Previously presented) The output adapter frame of Claim 5, further comprising four channels in parallel with each other.

7. (Previously presented) The output adapter frame of Claim 6, wherein the four channels comprise two outer channels capable of holding two 2" by 2" die carriers each and two inner channels capable of holding four 2" by 2" die carriers each.

8. (Previously presented) The output adapter frame of Claim 1, wherein the die carriers are approximately 4" by 4".

9. (Previously presented) The output adapter frame of Claim 8, wherein the at least one channel is a single channel.

10. (Previously presented) The output adapter frame of Claim 9, wherein the single channel is capable of holding two 4" by 4" die carriers.

11. (Previously presented) The output adapter frame of Claim 1, wherein the output frame and the at least one channel are a unitary structure.

12. (Previously presented) The output adapter frame of Claim 1, wherein the retention mechanism is a spring clip.

13. (Canceled).

LAW OFFICES OF  
MACPHERSON KWOK CHEN  
& NEID LLP

2402 MICHELSON DRIVE  
SUITE 210  
IRVINE, CA 92614  
(949) 752-7040  
FAX (949) 752-7049

14. (Currently Amended) ~~The output adapter frame of Claim 13~~ An output adapter frame for use with a die sorter, comprising:

a plurality of approximately square recesses, each square recess capable of holding one square die carrier, wherein the output adapter frame is handled in the same manner during the die sorting process as a SEMI standard output wafer frame, wherein the output frame has the same physical exterior dimensions as a SEMI standard film frame design for an 8-inch or 12-inch wafer.

15. (Currently Amended) ~~The output adapter frame of Claim 13~~ An output adapter frame for use with a die sorter, comprising:

a plurality of approximately square recesses, each square recess capable of holding one square die carrier, wherein the output adapter frame is handled in the same manner during the die sorting process as a SEMI standard output wafer frame, wherein the die carriers are approximately 2" by 2" or 4" by 4".

16. (Currently Amended) ~~The output adapter frame of Claim 13~~ An output adapter frame for use with a die sorter, comprising:

a plurality of approximately square recesses, each square recess capable of holding one square die carrier, wherein the output adapter frame is handled in the same manner during the die sorting process as a SEMI standard output wafer frame, wherein the adapter frame is a unitary structure.

17. (Previously presented) A die sorter for sorting die contained in square die carriers, comprising:

an input wafer cassette;

LAW OFFICES OF  
MACPHERSON KWOK CHAN  
& BEID LLP

2402 MICHELSON DRIVE  
SUITE 210  
IRVINE, CA 92612  
(949) 752-7040  
FAX (949) 752-7020

a plurality of wafer frames containing the die, wherein the wafer frames are capable of being loaded and unloaded from the input wafer cassette;

a first wafer frame handler for loading and unloading the wafer frames;

an output wafer cassette;

a plurality of adapter frames, wherein the adapter frames are capable of being loaded and unloaded from the output wafer cassette, and wherein the adapter frames comprise at least one recess capable of holding a plurality of die carriers having an open end and a closed end and at least one retention mechanism that actively biases the die carriers against an opposing side of the recess;

a second wafer frame handler for loading and unloading the adapter frames;

and

a die sorting mechanism to sort the die onto the die carriers on the adapter frames.

18. (Canceled).

19. (Original) The die sorter of Claim 17, wherein the die carriers are waffle packs or GEL-PAK die carriers.

20. (Original) The die sorter of Claim 17, wherein the adapter frames each comprise a plurality of parallel recesses, each recess capable of holding a plurality of the die carriers.

21. (Original) The die sorter of Claim 20, wherein the adapter frames each further comprise a retention mechanism along one side of the recesses.

LAW OFFICES OF  
MACPHERSON KWOK CHEN  
& HEID LLP  
2402 MICHELSON DRIVE  
SUITE 210  
IRVINE, CA 92617  
(949) 752-7040  
FAX (949) 752-7049

22. (Original) The die sorter of Claim 17, wherein the adapter frames have the same physical exterior dimensions as a SEMI standard film frame design for 8-inch or 12-inch wafers.

23-29. (Canceled).

LAW OFFICES OF  
MATTHEWSON KWOK CHEN  
& HSIO LLP

2402 MICHELSON DRIVE  
SUITE 210  
IRVINE, CA 92612  
(949) 752-7040  
FAX (949) 752-3010